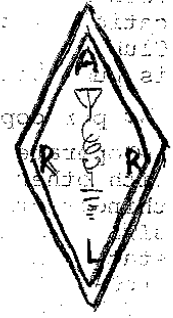


PACK RATS



CHEESE BITS



MT. AIRY V.H.F. RADIO CLUB, INC., PHILA., PA.
(50.2, 145.2, 221.4, 432.3 & 1296.3 MC)

CLUB CALL: W3CCX

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

MEMBER CLUB: DELAWARE VALLEY COUNCIL OF AMATEUR RADIO CLUBS

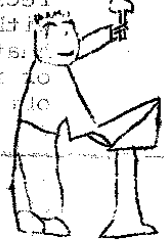
MEETING NOTICES: LAST PAGE

VOLUME XI

DECEMBER 1968

NUMBER 12

OUR PREZ SEN



To those members who missed last month's meeting I can only say too bad. You certainly missed an excellent talk given by Don Nelson, WA2EGZ on converters for V.H.F. using the latest transistors available to the amateur. The converters were available for examination after the talk and they generated tremendous interest and comments. Many thanks to Don for visiting with us. His talk was enjoyed by all.

As you may have noticed in the club constitution, the procedure for increasing the dues for the different categories of membership are different. To avoid, in the future, the necessity for submitting separate motions to the membership on the question of raising membership dues, some changes to the constitution and by-laws would have to be enacted. A motion with this intent was made at the October meeting and it was planned that a vote would be taken at the November meeting, but after the required review of several motions by the Board of Directors a motion was approved for submission to the membership. Due to the requirement that changes to the constitution be properly submitted to the membership at least two weeks prior to the voting date, the voting date is now planned for December. The new rates for Retired and Student members will be included.

I took a moment from my writing to look at the calendar and was shocked when I realized we are only 47 days away from the January contest and it will be a good deal less when you read this. So fellows, in spite of the good status reports received by the contest committee, don't put off anything you can do now that will make you ready for the contest. You have a swell hard working chairman and he deserves all the help you can give him, particularly, by turning in the best score you are capable of.

K3HSS, Charley

PACK RATS' CHEESE BITS is a publication of the Mt. Airy V.H.F. Radio Club, Inc., Philadelphia, Pa., and is published monthly.

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DEADLINE FOR ARTICLES IS THE 20TH OF EACH MONTH.

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DIRECTORS' MEETINGS ARE HELD ON THE SECOND WEDNESDAY OF EACH MONTH AT DESIGNATED LOCATIONS.

CODE PRACTICE:

7:00 TO 7:30 P.M. MONDAY THROUGH FRIDAY, 50.2 MC BY K3ZPN, LLOYD SCHOENIG.

MONDAY NIGHT NETS:

145.2 - 7:30 P.M.
50.2 - 8:30 P.M.
221.4 - 9:30 P.M.
432.3 - 10:00 P.M.

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MEETINGS: FOURTH WEDNESDAY OF EACH MONTH AT 8:00 P.M.

NR 191, October 17, 1968

ARRL has filed comments with FCC supporting Operation Retread Docket 18266 which would make former amateurs eligible for Novice after a year off the air. The League asks that current Technicians also be eligible for the privilege if they have not held a Novice license in the twelve months preceding application. Another ARRL filing, RM 1352 asks FCC to keep the whole six meter band open to all licensees, Technician Class and higher, contrary to the FCC present plan restricting 100 kHz to Advanced and Extra November 22, 1968 and 250 kHz to these licensees November 22, 1969. Other information will appear in November QST AR

NR 192, October 24, 1968

Canada announces the conclusion of a reciprocal operating agreement with Nicaragua, supplementing the list appearing on page 91 of October QST. Additionally, the United States has concluded a reciprocal operating agreement with the Republic of Ireland. Amateurs of one country visiting or residing in the other may obtain permission to operate their own amateur stations there. This new United States agreement with Ireland, along with the Barbados and Surinam, adds to the QST listing noted above AR

NR 193, October 31, 1968

Groups of amateurs desiring to form a radio club and current clubs suffering a lessening of activity may be unaware of ARRL club organizational material. The new League club kit contains material on club organization, affiliation and operation. Specialized enclosures note program ideas, a sample constitution, methods of maintaining club interest, a sample ARRL club bulletin and other useful items. The club kit is available without charge from ARRL, 225 Main Street, Newington, Connecticut 06111 AR

NR 194, November 7, 1968

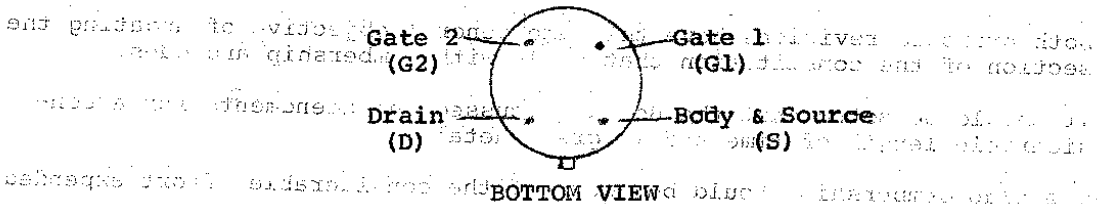
The sub band restrictions announced in Federal Communications Commission Docket 15928 go into effect on November 22, 1968. A tear out chart of the portions of the bands available to each class of license after that date is on page 64A of November QST. Copies of the chart are available from ARRL Headquarters, Newington, Connecticut 06111 upon receipt of a stamped self addressed envelope, with the words Amateur Frequency Chart in the upper left hand corner AR

TECHNICAL NOTE FROM TECHNICAL COMMITTEE

W2AXU, Jack Power

At the October meeting of the Mt. Airy V.H.F. Radio Club, Inc. a batch of General Instrument (GI) field effect transistors (FET) were available at a nominal price. For those who purchased these FET's the following technical information is presented to assist in the design of converters.

The FET's are equivalent to RCA's 3N140/3N141 transistors. Their design info can be used. The Basing is



Experimental results have shown that best operation can be obtained in a grounded source configuration. (This is akin to grounded cathode for vacuum tubes.)

Experimental Data -

- 2 Meters ----- 18 DB Gain
- (144 Mhz.) ----- 2.0 to 3.0 db - NF
- 1 1/4 Meters - 12 DB Gain
- (432 Mhz.) ----- 2.5 to 3.5 db - NF

Mixer performance at 432 Mhz. is poor, so it is not recommended.

For best NF set voltages and current as follows

- G2 = 10 V.D.C.
- G1 = 13 V.D.C.
- D1 = 13 MA with G1 bias set for D1 value

For any further information, it is suggested that a letter with an enclosed self-addressed and stamped envelope be dropped to K2RTH, Bruce.

The circuits using this type of FET may be followed changing the circuit values to meet the parameters set forth above.

After the fine talk by Don Nelson, WB2EGZ, given at the last meeting, there should be no difficulty in handling this type FET. One word of caution - be sure you follow all of Don's suggestions in handling these FET's as they are high impedance devices compared to the ordinary transistor.

73,
W2AXU, Jack

CHEESE BITS SUBSCRIPTIONS

NOTICE TO ALL SUBSCRIBERS AND EXCHANGE PAPERS

For many years, CHEESE BITS has held the line on cost to our subscribers and has sent many a copy to other clubs, some of whom do not reciprocate. Now costs have spiraled and we no longer can hold the line. The Board of Directors has voted to increase the subscriber cost to \$2.00 per year. This is slightly more than the postage and material cost. We will also check over our exchange list and eliminate those clubs which do not send us their paper. The future of CHEESE BITS looks rosy. A possible new method of reproduction will allow us to print technical articles with schematics, which has been a bugaboo in the past. We will also be able to print photographs of our activities. The above price hike goes into effect January 1, 1969, so as the subscribers subscription runs out after that date, they will be notified to renew at the new rate.

K3GAS, Doc Cutler, Publisher

CONSTITUTIONAL AMENDMENTS

K3JJZ, Elliott Weisman, Editor

I thought about mentioning the proposed constitutional amendment in the "Did You Know" column but decided that it is important enough to justify some detailed explanation. As you know, the last issue of CHEESE BITS carried a proposed constitutional amendment written by K3IUW, Bert Soltoff, which was read at the last general meeting. This issue of CHEESE BITS contains a proposed constitutional amendment written by W2AXU, Jack Power, which was revised by the Board of Directors at the November meeting.

Both proposed revisions have the same general objective of updating the section of the constitution that deals with membership and dues.

It should be noted that the Board discussed the amendments for a considerable length of time and in great detail.

The club membership should be aware of the considerable effort expended by both Bert and Jack on this matter.

73,
K3JJZ, El

PROPOSED AMENDMENTS TO THE CONSTITUTION AND BY-LAWS OF THE
MT. AIRY V.H.F. RADIO CLUB, INC.
Submitted by W2AXU, Jack Power
Revised by the Board of Directors

Article III, Section 4, Membership

- 4. Each membership application, in order to be eligible to be voted upon by the membership, shall have been approved by the Board of Directors, read to the membership at a regular meeting and the applicant's name, call and other pertinent data advertised in the club newspaper. The applicant shall be in attendance at the meeting when his application is brought to a vote of the membership. The vote shall be taken by written ballot or, at the unanimous discretion of the membership, an open vote. A unanimous vote of all members voting shall be necessary for the election to membership.

Article III, Section 5, Membership

- 5. There shall be three grades of membership:

a. Member - He shall meet all the requirements of membership as prescribed by the constitution and by-laws.

- b. Retired Member - A Member in good standing for one (1) year who because of business commitments, family responsibilities and/or any other unusual circumstances shall be eligible for the Retired Member grade. He will submit, in writing, to the recording secretary or the chairman of the membership committee his request to be placed in the Retired Member status. His request must be approved by the Board of Directors. An affirmative vote by a majority of members at a regular meeting shall be necessary to elect to Retired Member. A Retired Member will receive all of the privileges of a Member except that he will have no voting privileges. If a Retired Member desires to return to Member status, his request will be acted upon as required by Article III, Section 1, of the by-laws, Reinstatement.

- c. Student Member - A deserving teen-age male, at least 16 years of age, meeting all of the requirements for Member except for age shall be eligible for Student Member. He shall have performed outstanding service for the club in particular and amateur radio in general, the merit of the outstanding service to be determined by the Board of Directors. The Board of Directors shall approve the applicant and recommend him for Student Member to the membership where a majority vote at a regular meeting

will elect. A Student Member will have all of the privileges of Member except he will have no voting privileges. A Student Member may apply for Member upon reaching the age of 21 years. He will apply as required under Article III, Section 1, of the by-laws, Reinstatement.

CONSTITUTION

Article VIII, Meetings - New sections 3 and 4 added:

3. A quorum for conducting normal business shall consist of 30 percent of the Members, unless otherwise indicated.
4. Roberts Rules of Order shall govern the club. Where they conflict with the constitution and by-laws, the constitution and by-laws shall take precedence. The presiding officer may overrule Roberts Rules of Order whenever he deems it advisable except during the procedures attending the election of officers of the club, the election of membership and the amendment of the constitution and by-laws.

Changes to the By-Laws

Fees and Dues

1. An entrance fee of two dollars (\$2.00) shall be paid to the treasurer by a newly elected Member upon his election to membership along with the prescribed amount of dues.
2. The dues of a Member of the club shall be eight dollars (\$8.00) per year.
3. The dues of all grades of membership of this club shall be payable to the treasurer no later than the 31st day of January of the calendar year in which they are due.
4. A Member elected to membership in the third quarter of any calendar year shall pay the treasurer one-half (1/2) of the regular yearly dues. A Member elected to membership in the fourth quarter of any calendar year shall not pay any dues for that year.
5. The dues of a Retired Member shall be four dollars (\$4.00) per calendar year.
6. The dues of a Student Member shall be two dollars (\$2.00) per calendar year. The same pro-rata scale of dues as for Member (Section 4) shall apply.

OPPORTUNITY KNOCKS ONCE EACH YEAR
K3HSS, Charley Lustick, President

Because of the nature of the details and preparations necessary to make our Family Day Picnic a success in both a climate of hospitality and the prize department I feel the appointment of the chairman for this very important committee should be made within the next month. I know you have heard this story many times before, nevertheless, I am going to repeat it. To maintain the reputation of the Pack Rats, developed over the years, for doing things right and well, there is a special group of members, who are elected or appointed each year; who because of their club spirit pitch in and help to make every club endeavor a success. The opportunity to do this is available each year to everyone. So if you have ever felt like taking on the challenge of doing something worthwhile for the club now is the time - volunteer for the chairmanship of the picnic committee. I'll be listening for you.

73,
K3HSS, Charley

ANTENNA MEASURING PARTY
K3BEP, Walt Bohlman

The Mt. Airy V.H.F. Club held its first Antenna Measuring Party on October 13 at the QTH of K3UJD, Mario Fontana.

The measuring equipment which consisted of a pattern recorder; a rotating mast; signal sources for 50 Mhz., 144 Mhz., 220 Mhz., 432 Mhz., 1296 Mhz.; converters for these frequencies; a receiver; a calibrated attenuator; was built or supplied by K3UJD.

The steps used in making the measurements are as follows:

1. A commercially made calibrated dipole was adjusted to the proper length and mounted on the rotating mast.
2. The radiation pattern of the dipole was recorded on a strip chart recorder (the recorder was driven by a right angle output shaft from the rotator and the pen of the recorder was connected in series with the "S" meter of the receiver).
3. The dipole was then positioned broadside to the signal source, the strip chart was then calibrated in db with reference to a dipole by means of a calibrated attenuator.
4. The antenna to be measured was mounted on the mast in place of the dipole.
5. A known amount of attenuation was then inserted in the cable from the antenna thus dropping the level of the pen on the recorder. When the signal level indicated by the position of the pen came up to the dipole reference level, the gain of the antenna was equal to the inserted amount of attenuation. The calibrated scale allowed any amount of gain to be measured.
6. The antenna was then rotated 360° and the changing signal level recorded as a function of position.

Electronic companies spend many tens of thousands of dollars to obtain an accuracy of 0.5 db in gain and 0.5° position. To construct a similar semi-portable set up with amateur resources requires a tremendous amount of ingenuity and patience.

I would first like to mention some of the problems with the set up so that the results can be seen in perspective.

1. The noise output of the rotator motor was extremely high and refused to be filtered out by a capacitor. This limited the dynamic range of the set-up to about 30 db, which was still usable.
2. The signal strength of the signal source on the bands above 50 Mhz. was so strong that it leaked into the converter. This was cured somewhat by moving the source antenna farther away (about 6 db if you double the distance) and rotating the source antenna about 45°. Shielding the already shielded converters also helped.

3. The ink in the pen refused to flow smoothly (also a problem in industry) so the operator (which happened to be the author) was required to blow into plastic tube while holding his finger over the filler hole. Removing the finger from the hole caused ink to squirt over everything (which happened a couple of times).

The Measurements

50 Mhz. K3GAS 4 element beam 7 db gain, smooth pattern
inductively loaded dipole - 3 db gain nulls on the side not very sharp

144 Mhz. WB2OAD Beam 18 db
Beam 2 db

K3ZPN 4/4 J slot 1 db

220 Mhz. K3IUV 32 element collinear 20 db

THE BOOK RACK
 Paul R. Behrmann, K3WEU/*AREA

FREE BOOKS

Check into the Book Review Net on Tuesday evening at 8 p.m. on 50.2 mcs. and learn how to receive free books valued up to \$4.95 and even more.

A Moment in Camelot
 by Margaret Rennert

Published by Bernard Geis Associates, pps: 713 - \$8.95

The coincidence of Jacqueline Kennedy's recent marriage could not have been anticipated by the author or publisher, particularly when the release date for this book was to be just five days after Jackie's wedding to Onassis. The title is, of course, a giveaway that the story is really all about the Kennedy mystique wrapped up in the character of ALEC GIRARD.

The book has immense emotional impact as it tells the story of ALEC GIRARD's rise to the summit of his career while relating in intimate detail the course of a marriage. All those who have followed the John Kennedy career will probably recognize the characters of some of his advisors.

ALEXANDER GIRARD, in the book, is a Senator from Vermont, the girl he wooed and married is the beautiful ANDREA "ANDY" LANGWITH, and she like "Jackie" is more than beautiful for she has glamour, intelligence and a high society background.

Most readers will enjoy this book, XYL's, YL's and men will share and become involved in the story of the private and public lives of the young in politics today, the FARLANDS, a State Department pro and his pretty wife, of ANN TASWELL, the newspaper reporter whose professional skill cannot save her from the world's brutalities; of GIL KIMBALL, the columnist whose calm is shattered by a few day's events in a bloody southern town; and of ROSA LITTLE, the center of a quaking universe involved in civil rights.

There is too much in this book for a really brief review - but I do recommend it for your reading and ask you to remember that "For one brief shining moment there was Camelot".

FET Principles, Experiments, and Projects
 by Edward M. Noll

Published by Howard W. Sams & Co., Inc., pps: 232 - \$4.95

This book covers operating principles of FET's (field-effect transistors) and tells how to insert proper component values for favorable circuit operation. Experiments and projects using pegboard or simple chassis mounting arrangements teach FET operating characteristics. Includes a special chapter of FET mathematics in addition to the practical mathematics used throughout the book.

Audio enthusiasts, amateurs, SWL's, CB'ers, home experimenters and gadgeteers will find this book interesting.

Here is a partial list of excellent books from which you may choose gifts for Christmas or Hannukka giving:

A SALUTE TO AMERICAN COOKING by Stephen and Ethel Longstreet
 Published by Hawthorn Books, Inc. \$8.95
 Contains more than 500 native recipes grouped according to their geographic and ethnic origins. The recipes range from American Indian fare to the eclectic specialties of modern cities and from simple fried chicken to Roast Peahen a la Dixie.

THE POPULAR MECHANICS HOME BOOK OF ELECTRICAL WIRING AND REPAIR
 by Straus & Winters. Published by Hawthorn \$4.95

THE BOYS FIRST BOOK OF RADIO AND ELECTRONICS by Alfred Morgan
 Published by Scribners \$4.50

ANTENNA MEASURING PARTY (Continued)

The maximum possible gain of this type of antenna is 15 db which indicates that there was something wrong with the set up or Bert knows something the Antenna Engineers do not know.

- W2AXU W1HDQ Wood Boom Yagi 12 db typical for this antenna
- 432 Mhz. W3CJU 8 Element Collinear in front of a screen reflector 20 db gain. The maximum gain of this type of antenna is 12 db. Previous comments apply as well as Don's new paint job (secret formula).
- K3UJD Long Yagi 12 db. Measured 14 db on commercial range.
- K3IUU 32 Element Collinear 8 db
- 1296 Mhz. K0ZZM Quad Helix Good radiation pattern from hand held measurements.
- K3BPP 11/11 1/3 scale W1HDQ 432 Wood Boom Yagi. Good pattern, about 12 db measured at home.
- WB2IOE 14 12.4 Ghz. AEL L.P. not measured. The signal source at this frequency had very low output, thus making the previous type of measurements impossible.

The committee wishes to thank all of those that came with help as well as antennas. It is hoped that the get-together proved informative and helpful, and that it can be done again with the aid of the newly acquired experience.

K3BPP, Walt

THE BOOK RACK (Continued)

- THE BOYS SECOND BOOK OF RADIO AND ELECTRONICS by Alfred Morgan Published by Scribners \$4.50
- THE BOYS THIRD BOOK OF RADIO AND ELECTRONICS by Alfred Morgan Published by Scribners \$4.50
- CHOOSE LIFE by Bernard Mandelbaum Published by Random House \$5.95
- ONE THOUSAND INSPIRATIONAL THINGS compiled by Audrey Stone Morris Published by Spencer Press Hawthorn Books, Inc. \$5.95
- SIMPLIFIED TRANSISTOR THEORY By Training Systems, Inc. Stanley L. Levine. Published by John F. Rider, Inc. \$3.75
- REPAIRING TRANSISTOR RADIOS by Sol Libes A Rider Publication \$3.75
- RADIO TROUBLE SHOOTING GUIDEBOOK by John F. Rider and J. Richard Johnson \$2.95
- BASIC RADIO REPAIR by Marvin Tepper Published by John F. Rider Publishers, Inc. Division of Hayden Publishing Co. \$5.95

(Tepper is author of the excellent series BASIC RADIO)

K3WEU, Paul

ARRL BULLETINS (Continued)

NR 195, November 14, 1968 Canada announces the conclusion of a reciprocal operating agreement with Norway which, along with Nicaragua, supplements the list appearing on page 91 of October QST. Additionally, the United States has concluded a reciprocal operating agreement with Monaco, effective December 1. Amateurs of one country visiting or residing in the other may obtain permission to operate their own amateur stations there. Monaco along with the Barbados and Surinam, adds to the QST listing noted above AR

1296
WB2IOE, Lou Arnao

1296 or three times 432 mc. What's on 1296? Up to a year ago the closest stations on 1296 were in northern New Jersey and lower New York: K2JNG, W2CCY, W2COH, WA2VTR, JBZ, K2PPZ, BYE, CYG, and maybe more. They vary on power output from 100 watts down. W2CCY, with his water cooled pair of 2C39's 100 watt output, can be found smack on 1296 mc with his automatic cw wheel on for hours at a time.

The action seemed to start in the September contest when schedules were made on other bands for 1296 contacts between north and south. That was when K3DYO, Dick, made a contact with W2OJ in northern New Jersey. Dick was using a pair of 2C39's approximately 100 watt input to a single helical antenna. W2OJ had a dish on a tower running a varactor transmitter. I was hearing the stations but could not make any contacts with them. Then one night there was some talk on the 432 band of a station transmitting on 1296. I turned on my XTAL converter for 1296 and sure enough there was K2JNG talking to K2DZM, Michael, in Rahway, New Jersey. K2JNG, Walt, is in Union City, New Jersey. They had their antennas pointed at each other which meant K2JNG had his antenna pointed just about on me. I put my 32 element colinear on JNG and started to perk up my converter until we got the S meter up to an S6. Later he called CQ so I put my varactor tripler on with its five watt output and gave him a call, never expecting him to answer me. I was surprised when he came back to me on my first call with you are Q5 S3. This was my first contact over 10 air miles which later became a pipe line. K2JNG runs approximately 15 to 20 watts output. He was using a seven foot dish at last report.

We have been running a schedule with the fellows up north every night. They transmit from 2100 hours to 2115 hours and we transmit from 2115 to 2135 every night. On Monday and Thursday nights a different schedule is used where we transmit from 2030 hours to 2045 hours and they transmit from 2045 hours to 2100 hours.

The simple and easy way to get on 1296 transmitterwise is by the varactor. The varactor tripler in the ARRL V.H.F. manual has a couple of mechanical errors, but after these were corrected, it works very well. I know of four stations that are using this circuit. I worked three of these stations, the fourth being myself. Varactors require no power supply of any type. Plug it into your 432 transmitter, hook up your 1296 antenna and tune up your varactor tripler and you are on 1296 with approximately 50 to 60 percent of your 432 power output to the antenna.

For the first few months I used the APX6 along with K2HOL and K3DYO until we made our first contact on 1296 and started to improve the APX6 by trying narrower IF systems that are a lot narrower than the one that is in the APX6, which is originally around 2 mc wide yet not so narrow that a XTAL controlled transmitter could not be kept on frequency without having to tune the APX6 constantly. Around 10 to 13 kc was about as narrow as you would want the IF. K2HOL had a lot to do with the IF on the APX6. However, I wouldn't sell the APX6 short for use as a receiver. My APX6 is being used by WB2FDL with the wide band IF and Joe uses a five foot dish and he has copied K2JNG's signal from Union City, New Jersey on 1296. On a few occasions also, K3DYO is still using an APX6 for receiving. However, he is using a narrow IF in his. He made the contact with W2OJ up in northern New Jersey using the APX6 to receive W2OJ. You can always use it for a 1296 receiver even after everyone has gone to a XTAL converter and XTAL transmitter.

The antenna I am using is a 32 element (extended elements and spacing) curtain array in the Frank Jones V.H.F. handbook. It is two feet square, has 16 booms four inches long of 1/4 inch diameter copper and 32 elements of No. 12 wire which fit into the 1/4 inch booms just to give you some idea of the antenna size for this frequency.

I built the 1296 converter in the ARRL V.H.F. handbook which has an IF of 144 mc. Others have built this same converter. However, they have changed the IF to another frequency. I added a one transistor pre-amp and this makes a big difference in receiving signals on 1296. Transistors may be a little expensive for this frequency. However, they are coming down in price. The fellows from New Jersey are using a two transistor pre-amp and QST should have an article on this soon. I built the one transistor pre-amp by K2UYH in QST November 1967. However I did not use the transistor he called for. I have a Bell Labs type good to 3 gc.

Continued on Page 10

We took a trip up to W2CCY's QTH a few months ago and had a chance to talk to about six of the fellows from up there and at the same time see W2CCY's shack and so forth. Some of the fellows brought their equipment with them for us to see. We saw some pictures of the way they got together and made a mold on the ground to construct seven foot dishes for 1296 out of fiber glass. Pictures were taken in stages of the construction and were something to see. We even carried one of these antennas home with us on the top of K3DYO's car. Dick is using it now ... was - it blew down on to the roof, no damage to the dish. Back to the Helix. W2CCY is using a horn type of antenna now and along with us they have found that rain has a large effect on most 1296 antennas except the dish and the horn.

The 1296 band is open. Hope to hear more signals from the Pack Rats.

73,
WB2IOE, Lou

WE GET LETTERS

(Received by W3CL, Harry Stein)
From W4ZPF, Grandpa Bill (Ex K3HWZ)

Just returned from a trip to southern Florida and finally got my new call letters and transfer of activities to this location at 191 Daymore Parkway in Holly Hill, Florida 32017. This darn machine does not like the humid weather and sort of gets fouled up a bit when in use but the words are there so just read them. Also got hooked up on the TV Cable so no longer need the TV antenna and that is coming down and the six and two meter job is going up with a new rotator. Six meter activity in this town is just about nil as I can only find three guys but even so I am going to get the rig on the air and have a listen for some calls from up north. I understand there is a lot of two meter guys here but have not met any of them yet. I have been holding off answering your letter and also Doc's until I got my call so now you have it and we will carry on from there. It seems odd that all of our flowers are blooming now but I guess there are lots of things down this way that are a bit different. I only use one or two handkerchiefs a week and I have had no colds or any of the other little sniffles that used to get me up north. Weather has been fine and right now we are waiting to see how Gladys is going to treat us. So far all activity is on the west coast and except for slight wind and a little rain now and then we have no trouble here at all. I will direct my next letter to Doc and tell him what progress I am making with getting back on the air which I hope will be soon. Please give my regards to all the gang and also tell them I will keep my ears open for a signal from up north. Hope you enjoy the winter and snow up that way. Will try to make it light if at all and hope you don't get stuck. Please drop me a line and let me have the dope on any club activities. For now it is 73 and all to you.

GAVEL, GAVEL, NUMBER NINE?
K3DUC, Phil Delano, Contest Chairman

The excitement is building up again! Secret meetings, antenna parties, hot schematics, latest tips, wow! Two meters is the BIG band this year, hey? Watch for who in West Virginia? What's happening?

This year's ARRL V.H.F. Sweepstakes Contest promises to see more Pack Rats try harder for more points on more bands than any other year.

The Contest Committee and Coordinators have done an outstanding job in solving problems and getting the members of their teams ready for the assault on the airwaves, January 4 and 5.

If you are not on at least two bands this year, you will be in the minority, and there are several more members on 432 than last year.

Now is the time for the final check of equipment and time to be sure you have extra crystals, tubes, and other spares available.

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WA3BRV, Harry Hover, chairman of the refreshment committee has appointed K3IGX, Dick Boyle, and WA3CND, Howard Candy, to the committee.

WA3GNV, John, has passed his advanced class license. Congratulations!

K3WEU will give away books valued between \$.75 and \$4.95 to each station checking in to the book review net for four consecutive sessions. Books to each station checking into six out of eight nets. Stations checking in and out are not eligible for this award.

WA3HIT, Paul Rilling, had his picture printed in the October C.D. Bulletin.

K3HWZ, Grandpa Bill McCutcheon, who left for sunny Florida now has his new call - W4ZPF.

WB2SZK, Randy Bynum, passed the advanced class test.

K3YPL, Nick Behrmann, made the Dayton, Ohio Daily News. A four column write-up on a modern Yom Kippur service. Nick is a fourth year Rabbinic student and son of K3WEU, Paul Behrmann, of Book Review Net fame.

W2EIF, Jo Kilgore, broadcast the latter part of the 2 meter net in stereo on November 4. It seems his 220 transmitter was on at the same time.

W3CL, Harry Stein, reports that Harriett Soltoff, XYL of K3IUUV, looks good in the "breeze".

K3ZPN, Lloyd Schoenig, had to rebuild the heating system of W3KKN, Ernie Kenas. It seems Lloyd leaned a little too hard.

The reason W3ZRR, Ray Whitehead, missed the last meeting was because of his XYL, Eleanor. It seems she was helping him celebrate their 42nd anniversary.

MEETING NOTICES

The next DIRECTORS MEETING will be held at the QTH of K3IUUV, Bert Soltoff, 961 Warfield Lane, Southampton, Pennsylvania on December 11, 1968 at 8 p.m.

The next GENERAL MEETING will be held at the West Oak Lane Jewish Community Center, Sedgewick and Thouron Streets in Mt. Airy, on December 18, 1968 at 8 p.m. This is a closed meeting - members only. Subject: "January V.H.F. Sweepstakes Operating Procedure".

Conducted By: W3ZRR, Ray Whitehead
4534 N. Smedley St.
Phila., Pa. 19140
215 - 324-5910

WANTED: For Club Sponsored Code Practice

-- Will buy, trade or accept a donation of a 5 or 7 inch reel tape recorder or tape deck. This equipment is needed for continuance of Code Practice Sessions.

CONTACT: K3ZPN, Lloyd Schoenig
Red Lion Road
Philadelphia, Pa. 19114
637-6455

WANTED

- Electric trains, Lionel or Old American Flyer (3 rail)

CONTACT: Joe Bawduniak
Meeting House Road
Ambler R.D. #1, Pa.
215 - 643-0160

WANTED

- Stereo tape deck - buy or swap

CONTACT: WA3BIV, Carl Barrish
7948 Thoroun Street
Philadelphia, Pa.
LI 9-8765

FOR SWAP OR SALE

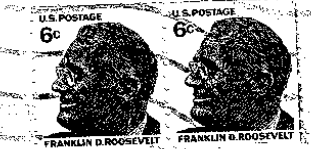
- New Heath RC Garage Door Opener
GD-117A - 290.15 MC \$80.00
- Sixer \$25.00
- UTC - S-50 Plate Transformer
3000 Volts - 300 Mils \$15.00
- 4 - 250 Tubes 4 for \$20.00
- Gonset Mobile RCVR G-66B \$39.00
- Honeywell Transistor Power
Supply W-612A 500 Volts, 250
Volts, 150 Watts \$25.00
- Ameco 6 Meter Conv. 28 mc. IF \$12.00

- BC-733-D Aircraft Rcvr.
108-12 mc. \$ 5.00
-Heath Warrior Linear \$130.00
- Johnson TR-SW 250-39 \$15.00
- Johnson Ranger with instructions
for 6 Meter Conversion \$80.00
CONTACT: K3AOT, John Winward
3554 Parkview Drive
Cornwells Heights, Pa.
639-7523

GAVEL, GAVEL, NUMBER NINE? (Cont.)

See you at the special closed meeting December 18. Don't miss the all-important inside information on what to look for and when. This year there are several tips you won't want to miss. If you need help before then, holler at your coordinator. He's ready!

BACK DATE CHANGES MADE
8533 ALCON AVENUE
PHILA., PA. 19152



FIRST CLASS MAIL

W3KKN Ernest Kenas
2823 Old Welsh Rd.
Willow Grove, Pa. 19090

MEETING NOTICE

Meeting notice text, partially obscured by bleed-through from the reverse side of the page. The text is difficult to decipher due to the heavy ghosting of the other side of the paper.

Extensive bleed-through text from the reverse side of the page, covering the right half of the document. This text is mirrored and largely illegible.